Please replace the Abstract with the following rewritten Abstract:

A pipe joint device using flanges is disclosed provided. The pipe joint device includes: flanges mounted to ends of pipes to be coupled together or ends of both a pipe and a pipe joint to be coupled together, the flange having at least one ring groove around an outer circumferential surface thereof; a packing mounted to the flanges and having inner rings around an inner circumferential surface thereof to closely engage with the ring grooves of the flanges; and a clamp having a packing seat to seat the packing therein, with a support sidewall formed by a radial inward extension of each side of the clamp, the clamp being divided into a plurality of clamp parts so that the clamp parts are placed around the packing and are fastened together by a locking member.